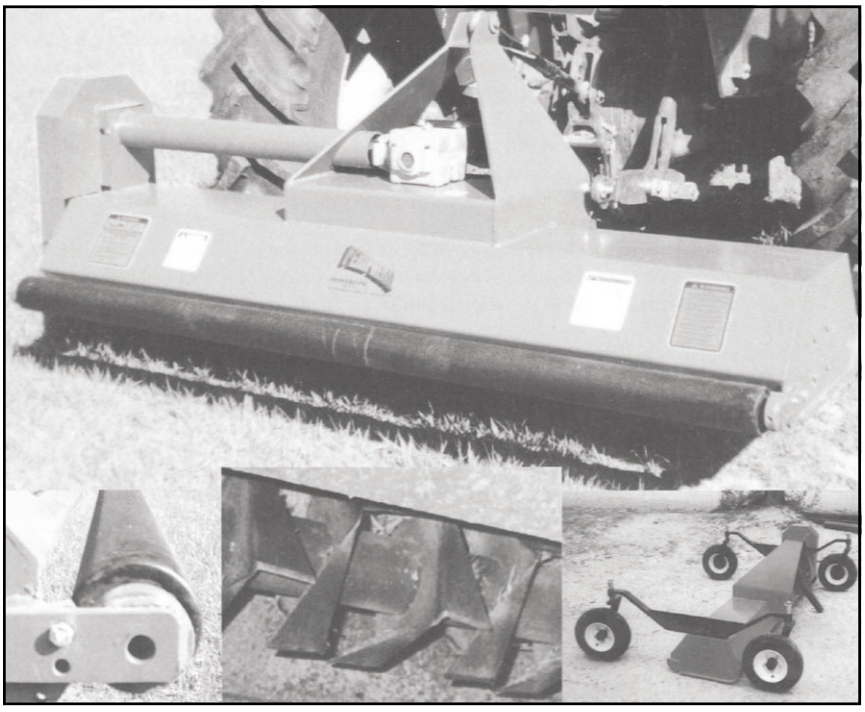
Peripheral Mower Blade

Innovative Mower Blade Design Improves Efficiency and Worker Safety

With assistance from the Department of Energy's Inventions and Innovation Program, Peripheral Mowers, Inc., has developed the Peripheral Blade Mower. The new and novel blade design eliminates the likelihood of accidents caused by mower-thrown objects, improves cutting efficiency, and is also adequate for mulching.

The Peripheral Blade Mower is actually a series of circular cutting disks, each about four-inches wide, mounted side-by-side along a horizontal shaft. Each disk has four horizontal cutting edges, or peripheral blades, spaced quarterly around the disk. With each revolution of the blade, the grass is cut, mulched, and then centrifugally thrown down into the lawn's subsurface for decomposition into the soil.

A primary advantage of the Peripheral Blade Mower is increased safety. Unlike rotary motors, whose blades rotate around a vertical shaft and tend to fling debris from under the mower deck, the Peripheral Blade Mower significantly reduces the chance of injury by projecting any debris straight down toward the ground. In addition, the Peripheral Blade Mower requires slower blade-tip speeds than conventional mowers, which allows a smaller, more efficient engine to be used, significantly saving energy and up to 30% in fuel costs.



The Peripheral Blade Mower

Overview

- Developed and marketed by Peripheral Mowers, Inc.
- Commercialized in 1999
- 63 units sold since 1999

Applications

- Commercial mower industry
- Mulching
- Hay conditioning
- Material shredding in right-of-ways

Capabilities

Offers increased safety by projecting any debris straight down toward the ground and not from under the mower deck.

Benefits

Energy

Reduces energy consumption and fuel costs by 30% over conventional mowers.

Waste Reduction

Provides a fine mulching cut, thus alleviating grass clippings, which require disposal.

Processing Cost Reduction

Increases life expectancy of mower blades and reduces processing costs.

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